

and go underwater, clinging to the surface of a leaf or any other object floating in the water. Each spider thus hiding, emerged cautiously a few minutes later. Many wolf spiders (Family Lycosidae) were also present near the edge of the same pond, revealing that they were the main competitors of raft spiders in the habitat. The raft spiders could not be observed catching prey, so a few specimens were caught with the help of a sweep net and kept alive in some vials. They were given some aquatic hemipteran bugs collected from the same habitat. The spiders readily fed on these bugs. Later on, the collected spiders were preserved in 70% ethyl alcohol and deposited in the Collection of the Zoological Survey of India, Jabalpur, Madhya Pradesh.

A review of the literature reveals that there is no previous record of *Dolomedes* spiders or of the Family Pisauridae from Madhya Pradesh. These spiders feed mainly on terrestrial and aquatic insects found in their habitat, but there have also been reports of them catching small fish and tadpoles (Gertsch 1979, Mafham and Mafham 1983, Kumar *et al.* 1999). As a result, these spiders are also known as fishing spiders.

They can also remain underwater for considerable periods. Gertsch (1979) has reported them remaining under water for 45 minutes at a stretch. Kumar *et al.* (1999) have reported *Dolomedes fimbriatus* remaining under water, clinging to the roots of the aquatic plant *Pistia* for a maximum duration of five and a half hours. They suggest that the spider's body hairs retain air bubbles that make contact with the respiratory orifices, and may thus provide the oxygen required for breathing under water.

ACKNOWLEDGEMENTS

Thanks are due to Dr. J.R.B. Alfred, Director, ZSI Kolkata, and Dr. K. Chandra, CRS, ZSI Jabalpur, for providing research facilities.

January 9, 2003

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13. REDISCOVERY OF *AERVA WIGHTII* HOOK. F. (AMARANTHACEAE), AN ENDEMIC, PRESUMED EXTINCT SPECIES, FROM TIRUNELVELI DISTRICT, TAMIL NADU, INDIA

(With one text-figure)

J.D. Hooker described *Aerva wightii*, Amaranthaceae, in 1885, based on a collection by Robert Wight from Courtallum, Tirunelveli district, Tamil Nadu, India. Gamble collected it in September 1914 from a different locality, Naterikal, in the same district. Ahmedullah and Nayar (1987) treated it

as an endemic to this district. Bhattacharyya and Haldar (1990) stated its survival as indeterminate and suggested locating populations in the natural habitat for introduction in botanic gardens for conservation and study. Nayar (1996) doubted its presence in nature, assigned it extinct category

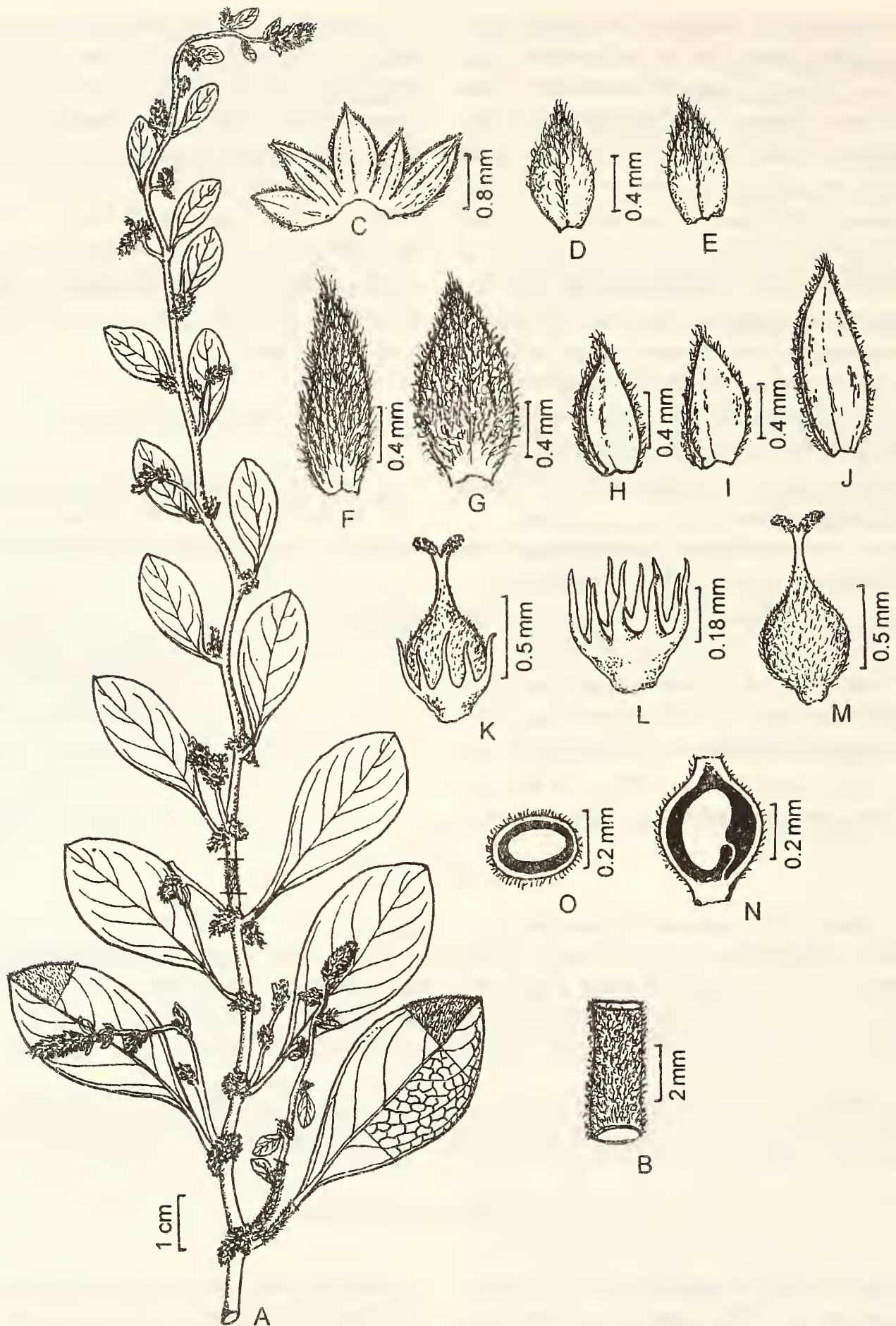


Fig. 1: *Aerva wightii*; A. A twig; B. Part of stem, enlarged; C. Perianth; D. Bracts; F - J. Tepals; K. Hypogynous cup and ovary; L. Hypogynous cup; M. Ovary; N. Ovary (l.s.); and O. Ovary (c.s.)

based on general field studies, and recommended a fresh survey in the type locality. After a lapse of about 85 years, it was rediscovered in the locality Puliyangudi Reserve Forest of the same district in January 1999 and is being represented here with a detailed description and an illustration.

Aerva wightii Hook. f., Fl. Brit. India 4: 728. 1885; Gamble, Fl. Pres. Madras 1178. 1925 (2: 825.1957 repr. ed.); Ahmedullah & Nayar, Endemic Plants Indian Region 1: 71. 1987; Kumari in Henry, Kumari & Chithra, Fl. Tamil Nadu 2: 190. 1987; Bhattacharyya & Geeta Haldar in Nayar & Sastry, Red Data Book Indian Plants 3: 11. 1990; Nayar in Molur & Walker, C.A.M.P. Report II: 59. 1996.

Sub-shrubs, arising from a woody rootstock, scandent below, erect above, up to 35 cm high; branches profuse, stiff. Leaves alternate, orbicular or obovate, 1.5-6.8 x 0.5-2.7 cm, attenuately cuneate at base, entire at margin, obtuse at apex, sparsely pubescent above, densely tomentose beneath, petioles up to 1.5 cm long. Spikes axillary, sessile, in clusters, yellowish white, densely woolly, up to 2.7 cm long; bracts unequal, hyaline, oblong-obovate, c. 1.8 x 0.4 mm, cuneately truncate at base, entire at margin, mucronate at apex, woolly outside, glabrous inside. Tepals 5, dissimilar, hyaline; 3 more or less similar, elliptic-ovate, 1.2-1.4 x 0.6-0.8 mm, acute at base, entire at margin, 1 acuminate at apex, another 2 mucronate at apex, woolly outside, glabrous inside; 2 oblong-elliptic, 1.6-1.8 x 0.5-0.6 mm, cuneately truncate at base, entire at margin, mucronate at apex, woolly outside, glabrous inside. Stamens 5; filaments subequal, c. 0.4 x 0.4 mm, connate in a hypogynous cup; staminodes 5, subulate, c. 0.4 x 0.4 mm, flattened towards base. Ovary globose, c. 0.5 x 0.5 mm,

glabrous, button-like at base; style subulate, c. 0.5 x 0.2 mm, glabrous; stigma 2-fid, subulate, c. 0.2 x 0.12 mm.

Distribution: Tirunelveli district, Tamil Nadu, India.

Material examined: Tirunelveli district: Courtallum, Southern Herbarium, Robert Wight 42325 (MH, Acc. No.); Naterikal, 23.ix.1914, J.S. Gamble 10982 (MH); Pulmottai, Puliyangudi R.F., 22.i.1999, c. 950 m, M.B. Viswanathan & N. Ramesh 1082 (Sri Paramakalyani Centre for Environmental Sciences, Manonmaniam Sundaranar University, Alwarkurichi).

Habitat: High altitudinal grassland dominated by *Cymbopogon flexuosus* with sparse occurrence of trees such as *Phyllanthus emblica*, *Pterocarpus marsupium* and *Bridelia crenulata*, herbs like *Plectranthus amboinicus* and *Anisomeles malabarica* and *Pterolobium hexapetalum* which is described as an 'armed straggler.'

ACKNOWLEDGEMENTS

We thank Dr. P. Daniel, Deputy Director, Botanical Survey of India, Coimbatore, for permission to refer to earlier collections in MH and Mr. S. Chellaiah, a Paliyan medicine man, for his cooperation and help during the fieldwork.

June 8, 2002

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